DEN5100C: Gross Anatomy

Fall 2021

# Course Description:

Basic macroscopic anatomical structure and functions of the human body, with emphasis on the head and neck will be presented thorough lectures, laboratory dissections and discussion sessions. This information serves as the foundation for understanding normal functions of the head, neck and oral structures as well as disorders related to those structures.

## General Information

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| Course Director:  | Venkatesh Nonabur |
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| Email: | nonabur@ufl.edu |
| Phone: | (352) 273-9393 |
| Course Credits: | 4 |
| Semester: | Fall |

## Contributing Faculty

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| Kyle E Rarey  |   | (352) 273-5753  | rarey@UFL.EDU  |

# II. Course Goals

The goal of this course is to introduce the basic principles and facts relating to gross anatomy of the human body, with emphasis on the head and neck. Knowledge in the anatomical sciences and functional relationships of the body is foundational in the development of competencies for the new dental graduate.

Through the designed learning experiences and course assignments the student will be able to

1. Identify vessels, nerves, muscles, bones and organs of the human body as well as identify specific cells and microanatomical structures in the structural tissues of the body.
2. Describe the relationship of vessels, nerves, muscles, bones and organs to each other.
3. Demonstrate how the body functions in health.
4. Differentiate how the body functions are altered in disease.
5. Interpret how different insults or injuries effect the body.
6. Relate the anatomical complex of the head and neck to other systemic body functions.
7. Given a clinical correlation, identify the anatomical landmarks important in understanding normal function.
8. Given a clinical correlation, apply anatomical knowledge to solve clinical situations.

# III. Course Overview

Course instruction will be accomplished through lectures and dissections.

## Lectures:

Lectures are designed to direct the student's reading and to emphasize material of primary importance. Generally, lectures provide overall concepts and the student will need to consult their reference text for specific details. The lecture format in most cases is centered on diagrammatic illustrations and most students obtain colored pencils or pens for note-taking. Specific reading assignments in the text are suggested for each lecture topic.

## Laboratories:

Attendance is mandatory to work in teams- Mandatory Attendance. Students must sign attendance sheet for each laboratory session. Students must also attend the safety procedures lab during orientation.

Gross anatomy laboratory sessions provide hands-on experiences that assist student learning through tactile procedures on three-dimensional portions of the human body. Details of laboratory procedures conduct and cadaver care are described in the course manual. All students must sign a Pledge of Respect form acknowledging the rules laid down by the Anatomical Board of the State of Florida before gaining admission to the dissection laboratory. No unregistered 'guests' may be permitted entry to the dissection laboratories at any time without written permission from the Executive Director of the Anatomical Board of the State of Florida. Moreover, PHOTOGRAPHY OF ANY PART OR ALL OF A CADAVER IS ABSOLUTELY FORBIDDEN AND CONSTITUTES GROUNDS FOR DISMISSAL FROM THIS COURSE. **Students are to report scheduled absences from labs 2 weeks in advance.**

## Clinical Correlation:

Clinical correlations will provide the student with examples of the application of learned material to the diagnosis and treatment of patients. These correlations will provide a basis for the continued application of learned anatomical sciences to clinical practice.

# IV. Course Outline

1. Back and spinal column

 2. Vascular and musculoskeletal systems

 3. Pectoral region and axilla

 4. Upper extremity (bones, joints and nerves)

 5. Upper extremity (blood supply and muscles)

 6. Upper extremity (hand, and functional anatomy)

7. Nervous system

8. Introduction to Head and Neck

 9. Neck I

 10. Neck II

 11. Skull osteology

 12. Gross face (cranial nerve)

 13. Temporal and infratemporal fossae

 14. Temporomandibular joint

 15. Pterygopalatine fossa and Ear

 16. Cranial fossae

 17. Orbit

 18. Pharynx and tongue

 19. Nasal cavity

20. Maxillary nerve and cranial ganglia

 21. Submandibular region

 22. Thoracic wall and pleura

 23. Heart

 24. Posterior mediastinum

 25. Abdominal wall and Inguinal region

 26. Abdominal viscera

 27. Diaphram, intestines and liver

 28. Posterior abdominal wall

# V. Course Material

## **Required Text:**

(Students must purchase)

Liebgott, *The Anatomical Basis of Dentistry, 4th Ed*, Mosby Elsevier, 2017, ISBN 9780323477307

## **Required Software:**

(Included in your Instrument, Technology and Supply fees)

Virtual Human Dissector: Touch of Life Technologies.

You will receive an email with a link to download the software on or before the first day of class. Students license access if for 4 years.

VH Dissector Computer Requirements are posted in the Documents section.

Support Information: Contact ToLTech at support@toltech.net or 800-329-2979

## Required Manual:

Manual of Human Dissection Kayle E Rarey et.al ISBN 1-885966-008

(Students must purchase at Health science center book store)

## Recommended texts:

Netter, F.H., *Atlas of Human Anatomy, 6th edition,* (2014) ISBN: 1455758884

*Stedman's Concise Medical Dictionary*,27th Ed, 2003. Lipincott, Williams & Wilkins ISBN: 0781746462

*Dorland's Illustrated Medical Dictionary, 32th Ed, 2011, ISBN: 1416062572*

## **Laboratory supplies:**

(may be purchased at the Health Center Bookstore)

Dissecting instruments will be provided for each table; however, individuals may wish to purchase their personal instruments. (Probe, with one pointed and one flat end; Forceps, 5 \_" rat-tooth and/or smooth tip forceps; Scissors, either 6 \_" operative or Metzenbaum; Scalpel handle, #3.

Scalpel blades (#10), and dissecting gloves will be provided.

## Electronic Resources:

Human Anatomy laboratory dissection

<http://imcip.meded.com/integrated/ha/>

## UF Health Science Center Library

[**http://library.health.ufl.edu/**](http://library.health.ufl.edu/)

**Choose Quick Link> databases>Stat!Ref e-books>Anatomy.tv>click on Anatomy.TV icon.**

Primal Pictures resources are the world’s most medically accurate and detailed 3D graphic rendering of human anatomy. With benchmark anatomy, physiology and clinical content, Primal Pictures is widely accepted as the best in class and used by thousands of health science educators, students and practitioners worldwide to teach, learn and practice.n to access.

Dental Lib Guide: <http://guides.uflib.ufl.edu/dental>

# VI. Course Objectives

1. Identify and describe the key anatomical structures of the back and spinal column.
2. Identify and describe the key anatomical structures of the vascular and musculoskeletal systems.
3. Identify and describe the key anatomical structures of the pectoral region and axilla
4. Identify and describe the key anatomical structures of the nervous system.
5. Identify and describe the bones, joints and nerves of the upper extremity.
6. Identify and describe the blood supply and muscles of the upper extremity.
7. Identify and describe the key anatomical structures of the hand.
8. Identify and describe the functional anatomy of the upper extremity.
9. Identify and describe the key anatomical structures of the neck.
10. Identify and describe the key anatomical structures of the bones of the skull.
11. Identify and describe the key anatomical structures of the face.
12. Identify and describe the key anatomical structures of the temporal and intratemporal fossae and the TMJ.
13. Identify and describe the key anatomical structures of the larynx.
14. Identify and describe the key anatomical structures of the pectoral cranial cavity.
15. Identify and describe the key anatomical structures of the orbit.
16. Identify and describe the key anatomical structures of the tongue and pharynx.
17. Identify and describe the key anatomical structures of the nasal cavity and submandibular region.
18. Identify and describe the key anatomical structures of the maxillary nerve and cranial ganglia.
19. Identify and describe the key anatomical structures of the pterygopalatine fossa.
20. Identify and describe the key anatomical structures of the thoracic wall and pleura.
21. Identify and describe the key anatomical structures of the heart.
22. Identify and describe the key anatomical structures of the posterior mediastinum.
23. Identify and describe the key anatomical structures of the abdominal wall and Inguinal region
24. Identify and describe the key anatomical structures of the abdominal viscera
25. Identify and describe the key anatomical structures of the posterior abdominal wall

# VII. Course Evaluation

**Attendance at all laboratory sessions is mandatory to work in teams.**

Written and laboratory (practical) examinations will be given to evaluate student performance.

Written examinations: will consist of approximately 6-8 questions per lecture session, and will include multiple choice, matching and/or short answer questions.

Laboratory examinations: the student will be expected to identify structures in cadavers and on dry material.

## Written Exams:

Exam 1= 16.5%

Exam 2=16.5%

Exam 3=16.5%

Exam 4=16.5%

## Lab Exams:

Exam 1= 8.5%

Exam 2= 8.5%

Exam 3= 8.5%

Exam 4= 8.5%

## Laboratory Examination & Retake Practical Exam (maximum of 1):

Students may reattempt ONE laboratory practical exam with a score of 64 or below. If the student scores 65% or above, the original score will be replaced by a 65%. If not the retake score will be the one earned. The highest grade a student can earn on a retaken laboratory exam is 65%. Because anatomic specimens cannot be accurately preserved for long periods of time, students scoring below 65% on the one laboratory practical examination must retake the exam within 72 hours.

## **Written Examination failure & Retake Exams (maximum of 2**):

Written examination one and two scores will be combined and averaged. Students will be required to take a retake examination on exam one and two topics if they do not achieve a minimum combined average score of 65% or higher on the combined average scores. The student must score 65% or above. This retake exam will be scheduled the week after Fall break. The original failing exam one OR two grades will be replaced by a 65% once the student passes the retake examination. The highest grade a student can earn on a retaken exam is 65%.

Written examination three and four scores will also be combined and averaged. Students will be required to take a retake examination on exam three and four topics if they do not achieve a minimum combined average score of 65% or higher on the combined average scores. The student must score 65% or above. This retake exam will be scheduled in December. The original failing exam three OR four grades will be replaced by a 65% once the student passes the retake examination. The highest grade a student can earn on a retaken exam is 65%.

Students whose final average score is below 65% will be awarded an “E” grade and reported to SPEC.

## **Course Remediation:**

The student would take a comprehensive written exam the first week in January with a minimum passing grade of 65% and the student would be awarded a "D" grade.

“Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at [https://ufl.bluera.com/ufl/](https://gatorevals.aa.ufl.edu/students/). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.”

# IX. Administrative Practices

Administrative practices for all UFCD courses are universally applied. Exceptions to or deviations from these practices are stated in the individual syllabi by the course director. When not individually stated in the syllabus, course administrative practices default to those identified under "Course Policies" on the DMD Student Website:

<https://dental.ufl.edu/education/dmd-program/course-policies/>

# X. Grade Scale

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| **DEN5100C Grade Scale**  |
| **Method**  | Letter Grade  |
| **Scale**  | 100  |

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| A | 95 - | 100 |
| A- | 90 - | 95 |
| B | 86 - | 90 |
| B+ | 82 - | 86 |
| B- | 80 - | 82 |
| C+ | 74 - | 80 |
| C | 72 - | 74 |
| E | <72 |  |